

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1.(previously presented) An ultrasonic surgical instrument comprising:

an ultrasonic blade having a one-half wave segment comprising a first portion, a second portion and a third portion, and the first portion comprising a first cross-sectional area and the second and third portions comprising a second cross-sectional area.
- 2.(previously presented) An ultrasonic surgical instrument comprising:
 - a) a housing;
 - b) a tubular sheath having a proximal end joined to the housing, and a distal end;
 - c) an ultrasonic waveguide positioned within the tubular sheath and having an end effector extending distally of the distal end of the tubular sheath; the waveguide having a one-half wave segment comprising a first portion, a second portion and a third portion, and the first portion comprising a first cross-sectional area and the second and third portions comprising a second cross-sectional area.
- 3.(original) The ultrasonic surgical instrument of claim 2 further comprising a clamp arm pivotally mounted on the distal end of the tubular sheath for pivotal movement with respect to the end effector for clamping tissue between the clamp arm and end effector.
- 4.(previously presented) The ultrasonic surgical instrument of claim 1, wherein the first cross-sectional area is greater than the second cross-sectional area.
- 5.(previously presented) The ultrasonic surgical instrument of claim 1, wherein the first cross-sectional area is less than the second cross-sectional area.

6.(previously presented) The ultrasonic surgical instrument of claim 1, wherein the first cross-sectional area is constant.

7.(previously presented) The ultrasonic surgical instrument of claim 1, wherein the second cross-sectional area is constant.

8.(previously presented) The ultrasonic surgical instrument of claim 4, wherein the second cross-sectional area is variable.

9.(previously presented) The ultrasonic surgical instrument of claim 5, wherein the second cross-sectional area is variable.

10.(previously presented) The ultrasonic surgical instrument of claim 1, wherein the second portion is located proximal to the first portion.

11.(previously presented) The ultrasonic surgical instrument of claim 1, wherein the third portion is located distal to the first portion.

12-14(canceled)

15.(new) An ultrasonic surgical instrument comprising:

an ultrasonic blade having a one-half wave segment comprising a first portion, a second portion and a third portion, and the first portion comprising a first cross-sectional area and the second and third portions comprising a second cross-sectional area and wherein the first portion comprises a distal end and a proximal end, the distal end is connected to the second portion and the proximal end is connected to the third portion.

16.(new) An ultrasonic surgical instrument comprising:

- a) a housing;
- b) a tubular sheath having a proximal end joined to the housing, and a distal end;
- c) an ultrasonic waveguide positioned within the tubular sheath and having an end effector extending distally of the distal end of the tubular sheath; the waveguide having a one-half wave segment comprising a first portion, a second portion and a third portion, and the first portion comprising

a first cross-sectional area and the second and third portions comprising a second cross-sectional area and wherein the first portion comprises a distal end and a proximal end, the distal end is connected to the second portion and the proximal end is connected to the third portion.

17.(new) The ultrasonic surgical instrument of claim 16 further comprising a clamp arm pivotally mounted on the distal end of the tubular sheath for pivotal movement with respect to the end effector for clamping tissue between the clamp arm and end effector.

18.(new) The ultrasonic surgical instrument of claim 15, wherein the first cross-sectional area is greater than the second cross-sectional area.

19.(new) The ultrasonic surgical instrument of claim 15, wherein the first cross-sectional area is less than the second cross-sectional area.

20.(new) The ultrasonic surgical instrument of claim 15, wherein the first cross-sectional area is constant.

21.(new) The ultrasonic surgical instrument of claim 15, wherein the second cross-sectional area is constant.

22.(new) The ultrasonic surgical instrument of claim 18, wherein the second cross-sectional area is variable.

23.(new) The ultrasonic surgical instrument of claim 19, wherein the second cross-sectional area is variable.